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UNITED STATES DEPARTMENT OF AGRICULTURE

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

FOREST INSECT INVESTIGATIONS

Project h-1-22 Date Author RMO

SUBJECT—

TITLE

FOREST INSECT SURVEY - STANISLAUS NATIONAL FOREST

SEASON OF 1944

by

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FOREST INSECT SURVEY - STANISLAUS NATIONAL FOREST
SEASON OF 1944

1. FIELD EXAMINATION.

   Bureau of Entomology and Plant Quarantine.
   J. E. Patterson, G. R. Struble - October 24-27

2. AREAS EXAMINED (See Map)

   Parts of Mokelumne, Calaveras, Long Barn, Dardenelle, Clavey, Tuolumne, and Coulterville.

3. SURVEY METHODS.

   Reconnaissance - Road strips and counts of faded trees from high vantage view points.

4. CURRENT INSECT TRENDS AND LOSSES.

   Generally low endemic conditions prevail throughout the Forest. Infested trees broadly scattered, no grouping indicated. Measured losses and estimates of losses by areas are summarized in Tables 1 and 2.

5. INSECTS INVOLVED IN CURRENT KILL.

   Western pine beetle, Dendroctonus brevicomis Lec. in ponderosa pine; D. monticolae Hopk. in sugar pine; D. jeffreyi Hopk. in Jeffrey pine; Ips confusus Lec. killing tops and branches of ponderosa and sugar pine in isolated cases.

6. SPECIAL DEVELOPMENTS DURING SEASON.

   Windthrown trees during February 1944 numerous in some areas. Those in the Pinecrest area were removed and salvaged, lessening the beetle hazard there; but in other areas, particularly the Mokelumne, Clavey and Calaveras, this condition is a potential menace to standing timber.

7. AREAS REQUIRING SPECIAL ATTENTION.

   Mokelumne, Calaveras, Clavey. These areas should be watched more closely than the others because of blowdowns and logging activity to detect any localized insect outbreaks as a result of breeding in down material and logging slash. Some evidence of early seasonal (1944) Ips topkilling in the Mokelumne area was noted. Down sugar pine logs are a particular menace because of mountain pine beetle activity.

8. RECOMMENDATIONS.

   The endemic conditions found everywhere on the Forest at the time of the October survey indicated no need for immediate control work.

Approved by:

F. P. Keen
Entomologist, in Charge

Submitted by:

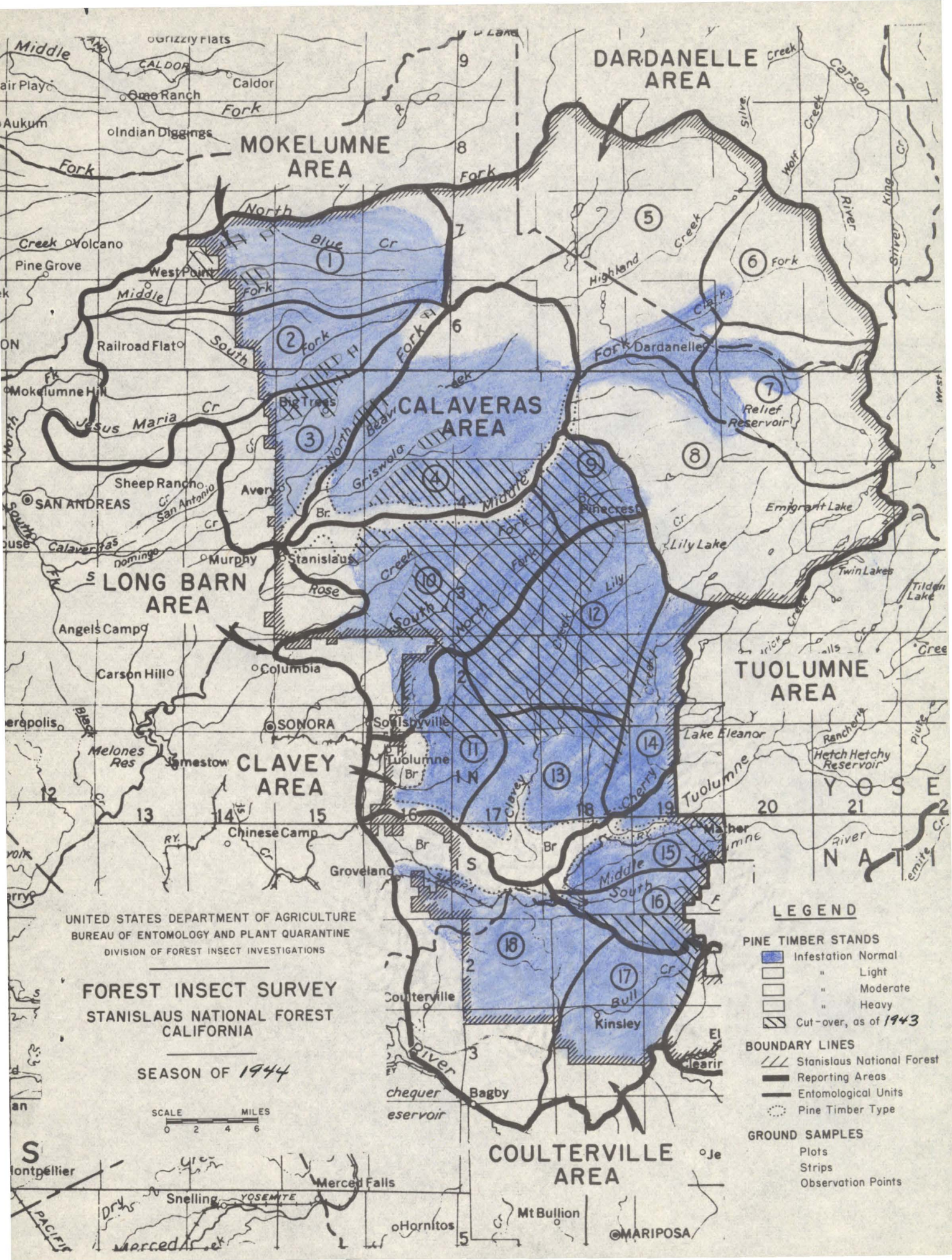
G. R. Struble
Entomologist

Table 1. Measured Pine Losses Recorded in Roadside Strip Areas, 1942-1944

Entomological Unit	Sample Strip	Acres	Comparative Losses Last 3 Years 1942 Trees	1942 BM/Ac	1943 Trees	1943 BM/Ac	1944 Trees	1944 BM/Ac
1 Hermit Springs	RD-1	236	5	13	5	13	1	11
2 Blue Mountain	RD-2	120	0	0	3	67	Cutover	
3 Dorington	RD-3	296	1	8	4	42	3	21
8 Niagara	RD-4	216	2	10	3	6	4	12
9 Pinecrest	RD-5	168	3	100	3	43	0	0
9 Pinecrest	RD-6	92	0	0	0	0	0	0
9 Pinecrest	RD-7	56	0	0	0	0	0	0
9 Pinecrest	RD-8	88	1	31	4	60	0	0
18 Buck Meadows	RD-9	268	1	2	3	7	4	6

Table 2. Estimated Bark Beetle Losses during 1944 in Commercial Pine Stands.

Unit No.	Name of Unit	Acreage	Trees
Loss of 10 feet BM or less per Acre (Normal Infestation)			
1	Hermit Springs	55,000	275
2	Blue Mountain	58,000	300
4	Griswold	64,000	300
5	Highland	83,000	250
6	Clarks Fork	20,000	35
7	Brightman	25,000	40
9	Pinecrest	10,000	30
10	Mt. Knight	83,000	100
11	Westside	32,000	100
12	Dodge	39,000	150
13	Jawbone	26,000	90
14	Cherry Valley	13,000	50
16	South Fork	16,000	60
8	Niagara	32,000	250
15	Mather	13,000	130
17	Bull Creek	25,000	290
18	Buck Meadows	51,000	450
Loss of 11 to 20 feet BM per Acre (Normal Infestation)			
3	Dorington	37,000	250



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FOREST INSECT SURVEY

STANISLAUS NATIONAL FOREST
CALIFORNIA

SEASON OF *1944*

SCALE MILES
0 2 4 6

LEGEND

PINE TIMBER STANDS
- Infestation Normal
- " Light
- " Moderate
- " Heavy
- Cut-over, as of *1943*

BOUNDARY LINES
- Stanislaus National Forest
- Reporting Areas
- Entomological Units
- Pine Timber Type

GROUND SAMPLES
- Plots
- Strips
- Observation Points